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MANITOBA HEALTH RESEARCH COUNCIL

S107 - 750 Bannatyne Avenue

Winnipeg, Manitoba R3E 0W3

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MEMBERS OF THE MANITOBA HEALTH RESEARCH COUNCIL

Dr. Lyonel G. Israels*, Chairman
- Executive Director, Manitoba Cancer Treatment & Research Foundation

Dr. J. Foerster*
- Professor and Head, Department of Medicine, St. Boniface General Hospital

Dr. Helen Glass
- Professor of Nursing, University of Manitoba

Dr. K.R. Hughes*
- Dean of Graduate Studies, University of Manitoba

Dr. M.I. Hussain
- General Surgeon, Selkirk, Manitoba

Dr. A. Kristjanson*
- Professor of Sociology, University of Manitoba

Dr. J.P. Maclean
- Director of Nuclear Medicine, St. Boniface General Hospital

Dr. A. Naimark**
- President, University of Manitoba

Mr. D. Pascoe
- Director, Research & Planning Directorate, Manitoba Department of Health

Mr. R.K. Siddall
- Vice President and Secretary, The Great West Life Assurance Company

Dr. J.G. Wade**
- Dean of Medicine, University of Manitoba

* Members of the Executive and Finance Committee

** Appointed by the University of Manitoba

COUNCIL SECRETARIAT

Executive Director - Dr. Frits C. Stevens

Administrative Secretary - Priscilla Loewen

REPORT OF THE CHAIRMAN

In fiscal 1984-85 monies became available from the Manitoba Lotteries Fund. The income from this source was projected at $972,000. The base funding from the Manitoba Department of Health remained unchanged at $787,000 giving a total proposed budget of $1,759,000. This increased funding base allowed Council to increase its awards program to four career awards, thirteen postdoctoral fellowships, twenty-three studentships and thirty-nine operating and equipment grants. In these categories the percentage of applications funded was 28% of career awards, 39% of fellowships, 49% of studentships and 31% of operating and equipment grants.

In analyzing the distribution of personnel awards and operating grants the successful applications in the category of social sciences, nursing, epidemiology, psychology and psychiatry were 8 of 29 or 28% of these applications. In the fields of basic medical sciences and clinical sciences the success rate was 54 of 224 or 24%.

Council based it expenditures on an estimate of lottery revenues as provided by the Department of Health. Actual revenues were $263,000 less than anticipated and this resulted in an over-committment of approximately $200,000. This over-expenditure will be recovered in the coming fiscal year and will result in a corresponding reduction in funds available for distribution in the fiscal year 1985-86.

The 1984 Reference List of Health Sciences Research in Manitoba compiled by Council shows that for the 1984 calendar

year a total of $16.5 million (1983 - $13.9 million) was expended on health research in the Province of which 73% came from outside the Province. Funds provided by the Manitoba Health Research Council accounted for 10.5% of total funds as compared to 5.4% in 1983.

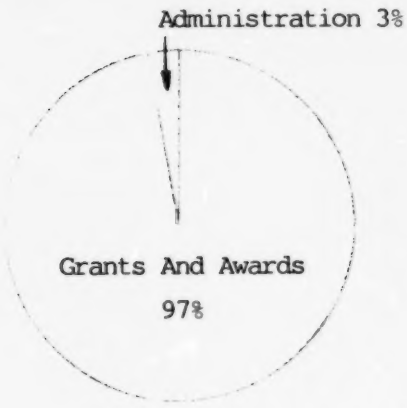
Council's audited financial statement, lists of scientific review committees and grants and awards for 1984/85 are detailed in the remainder of the report.

* * *

FISCAL OVERVIEW 1984-85

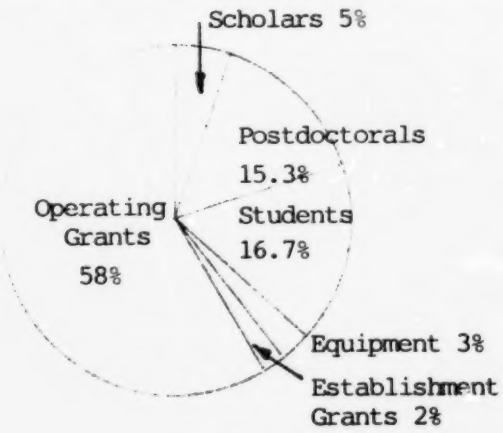
TOTAL EXPENDITURES

$ 1,704,360



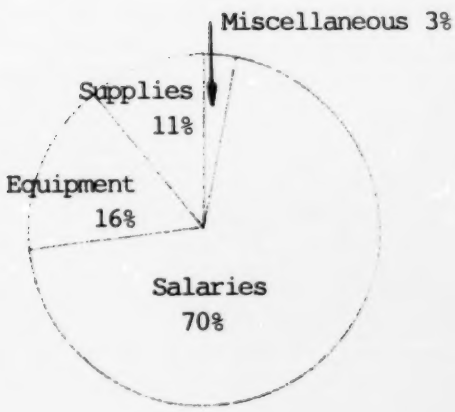
GRANTS AND AWARDS

$ 1,653,158



ADMINISTRATION

$ 51,202



Manitoba

THE MANITOBA HEALTH RESEARCH COUNCIL

REPORT OF THE PROVINCIAL AUDITOR'S OFFICE

We have examined the financial statements, being Exhibits A and B and Schedule 1, of The Manitoba Health Research Council for the fiscal year ended March 31, 1985. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests and other procedures as we considered necessary in the circumstances.

In our opinion, these financial statements present fairly the financial position of the Council as at March 31, 1985 and the results of its operations for the year then ended in accordance with the accounting policies stated in note 3 to the financial statements applied, after giving retroactive effect to the change in the method of accounting for research grant expenditures as explained in note 4, on a basis consistent with that of the preceding year.

Fred H. Jackson

F. H. Jackson, C.A.,
Provincial Auditor.

September 16, 1985,
Winnipeg, Manitoba.

Exhibit A

THE MANITOBA HEALTH RESEARCH COUNCIL

Balance Sheet
as at March 31, 1985
(with 1984 figures for comparison)

	1985	1984
ASSETS		
Cash	$ 40,134	$ 10,224
Grant receivable from The Manitoba Lotteries Foundation	161,910	-
Grant receivable from the Province of Manitoba	102,364	-
Accrued interest	1,051	556
	$ 305,459	$ 10,780
LIABILITIES AND DEFICIT		
Accounts payable	$ 3,494	$ 1,130
Research grants payable (Note 4)	507,580	27,650
Deficit (Note 4), Exhibit B	(205,615)	(18,000)
	$ 305,459	$ 10,780

Approved on behalf of the Council:

DIRECTOR

DIRECTOR

The accompanying notes are an integral part of the financial statements.

Exhibit B

THE MANITOBA HEALTH RESEARCH COUNCIL

Statement of Revenues and Expenditures and Deficit
for the year ended March 31, 1985
(with 1984 figures for comparison)

	1985	1984
Revenues:		
Grant from the Province of Manitoba	$ 787,000	$ 763,000
Grant from The Manitoba Lotteries Foundation (Note 5)	708,952	-
Returned grant funds	18,848	17,162
Bank interest	1,945	1,657
	1,516,745	781,819
Expenditures:		
Research grants (Note 3(b)):		
University of Manitoba on behalf of grantees	1,653,158	808,240
University of Winnipeg on behalf of grantees	-	33,500
Manitoba Cancer Treatment and Research Foundation on behalf of grantees	-	1,625
	1,653,158	843,365
Administration expenses, Schedule 1	51,202	41,002
	1,704,360	884,367
Expenditures over revenues	187,615	102,548
Deficit (surplus), beginning of year	18,000	(84,548)
Deficit, end of year, Exhibit A	$ 205,615	$ 18,000

The accompanying notes are an integral part of the financial statements.

Schedule 1

THE MANITOBA HEALTH RESEARCH COUNCIL

Administration Expenses
for the year ended March 31, 1985
(with 1984 figures for comparison)

	1985	1984
Accounting and audit	$ 875	$ 2,109
Bank charges	50	46
Council and committee expenses	405	402
Insurance	75	-
Office equipment (Note 3(a))	8,255	1,465
Postage and delivery	1,236	514
Printing and stationery	4,236	3,074
Salaries and benefits	35,739	33,067
Telephone	331	325
Total administration expenses, Exhibit B	$ 51,202	$ 41,002

The accompanying notes are an integral part of the financial statements.

THE MANITOBA HEALTH RESEARCH COUNCIL

Notes to the Financial Statements for the year ended March 31, 1985

1. INCORPORATION AND FUNCTION

The Manitoba Health Research Council was established by an Act of the Legislature, being Chapter 31, The Manitoba Health Research Council Act, which came into force effective August 15, 1982. The Council was established to promote and assist basic, clinical and applied research in the health sciences in Manitoba and advise the Minister in respect of such matters relating to health research as the Minister may refer to the Council for its consideration.

2. CHARITABLE STATUS

The Manitoba Health Research Council is a registered charity within the meaning of the Income Tax Act.

3. SIGNIFICANT ACCOUNTING POLICIES

(a) An accrual basis of accounting is used except for office equipment purchases, which are charged to expenditures in the year of acquisition.

(b) Research grants are charged to expenditures when funding is approved by the Council.

4. CHANGE IN ACCOUNTING POLICY

The Council changed its method of accounting for research grants to recognize them as expenditures when funding is approved. Previously, research grants were reflected as commitments when funding was approved and charged to expenditures when they were paid. This change increased the research grants payable by $507,580, with a corresponding effect on the deficit at March 31, 1985. The change was applied retroactively and resulted in the restatement of the previous year's comparative figures, increasing the grants payable and deficit by $27,650.

5. GRANT FROM THE MANITOBA LOTTERIES FOUNDATION

For the year ended March 31, 1985, the Council received a grant from The Manitoba Lotteries Foundation under a new system of distribution of lotteries proceeds.

OPERATING & EQUIPMENT GRANTS

A. SCIENTIFIC REVIEW COMMITTEE

Dr. J. Hamerton (Chairman), Department of Human Genetics,
University of Manitoba.

Dr. J. Arnett, Department of Psychiatry,
Health Sciences Centre.

Dr. F. Baldwin, Department of Pathology,
University of Manitoba.

Dr. J. Borsa, Atomic Energy of Canada,
Whiteshell Nuclear Research Establishment

Dr. D. Bose, Department of Pharmacology,
University of Manitoba.

Dr. H. Duckworth, Department of Chemistry,
University of Manitoba.

Dr. P. Farrell, School of Nursing,
University of Manitoba.

Dr. N. Fleming, Department of Oral Biology,
University of Manitoba.

Dr. R.J. Hoeschen, Department of Internal Medicine,
St. Boniface Hospital.

Dr. M. Janisse, Department of Psychology,
University of Manitoba.

Dr. F. Kisil, Department of Immunology,
University of Manitoba.

Dr. P.C. Loewen, Department of Microbiology,
University of Manitoba.

Dr. J.K. McKenzie, Department of Nephrology,
Health Sciences Centre.

Dr. J.A. Paterson, Department of Anatomy,
University of Manitoba.

Dr. L.L. Roos, Department of Administrative Studies,
University of Manitoba.

Dr. R. Shiu, Department of Physiology,
University of Manitoba.

Scientific Review Committee (Continued)

Dr. K. Simons, Faculty of Pharmacy,
University of Manitoba.

Dr. J.A. Thliveris, Department of Anatomy,
University of Manitoba.

Dr. G. Tomlinson, Department of Chemistry,
University of Winnipeg.

Dr. J. Winter, Department of Pediatrics,
University of Manitoba.

B. LIST OF EQUIPMENT GRANTS

Investigator, Department, Institution. Title.	Award Amount
CHENG, G.K.-W. and MATUSIK, R.J., Physiology, Univ. of Manitoba. Ultrancentrifuge Rotors, Freezer, Spectrophotometer.	$ 12,000
LAUTT, W.W., Pharmacology & Therapeutics, Univ. of Manitoba. Start-up Equipment for Hepato-renal Research Unit.	17,800
McCREA, D.A., Physiology, Univ. of Manitoba. Construction of a device to deliver controlled stretches to muscles in the cat.	8,600
O'NEILL, S.J., Medicine/Respiratory Diseases, Univ. of Manitoba. Laminar Flow Hood/Fluorescent Microscope.	7,000
	$ 45,400

C. LIST OF OPERATING GRANTS

ALI, J., Surgery, Univ. of Manitoba. Factors Affecting Early Changes in Intra-pulmonary Shunt in High Pressure Pulmonary Oedema.	$ 17,500
BERCZI, I. and FRIESEN, H.G., Immunology & Physiology, Univ. of Manitoba. Regulation of Mammary Immune Function.	19,700

C. List of Operating Grants (Continued)

BIHLER, I., Pharmacology & Therapeutics, Univ. of Manitoba. Glucose Transport in Chromaffin Cells and Their Primary Cultures.	$ 30,900
BOSE, D., Pharmacology & Therapeutics, Univ. of Manitoba. Mechanism of Digitalis-Induced Oscillatory Activity in the Heart.	10,300
BOWDEN, G.H.W. and HAMILTON, I.R., Oral Biology, Univ. of Manitoba. Changes in Metabolic Activity and Antigenic Structure of Oral Bacteroides Growing in Anaerobic Continuous Culture.	32,000
BRUNHAM, R.C., Medical Microbiology , Univ. of Manitoba. Molecular Analysis of the Humoral Immune Response to Chlamydia Trachomatis.	24,500
CHOY, P.C., Biochemistry, Univ. of Manitoba. Lysophospholipid Metabolism During Cardiac Arrhythmias in the Canine Heart.	30,000
COHEN, M.M., DUNCAN, P.G. and ROOS, N.P., Social & Preventive Medicine, Univ. of Manitoba. Assessing Anesthetic and Surgical Risks Associated With Operative Procedures at the Health Sciences Centre: A Ten Year Study.	31,500
DAVIE, J.R., Biochemistry, Univ. of Manitoba. Structural Analysis of Protamine Gene Chromatin in Developing Trout Testis.	26,800
DEAN, H.J. and WINTER, J.S.D., Pediatrics, Univ. of Manitoba. Evaluation of Short Term Growth Measurements in Growth Disorders in Children.	34,600
DODD, J.G., Physiology, Univ. of Manitoba. Cloning and Characterization of Genes Expressed by the Human Prostate.	34,300
FAIMAN, C., Internal Medicine, Univ. of Manitoba. Gonadotropin Regulation in the Fetus - Endogenous Opiates and Gonadal Influences.	12,000
GARTNER, J.G., Pathology, Univ. of Manitoba. Studies on the Effector Cells Which Mediate the Pathological Lesions Caused by the Graft Versus Host Reaction.	38,000

C. List of Operating Grants (Continued)

GRAHAME, R.E., DUBO, H.I.C. and QUANBURY, A.O., Anatomy, Univ. of Manitoba. An Electromyographic and an Electrogonimetric Analysis of the Role of the Paravertebral and Abdomonal Muscles in Normal Individuals During Five Types of Locomotion.	$	7,700
HUDSON, R.J., Anaesthesia, Univ. of Manitoba. Fentanyl: Electroencephalographic and Clinical Pharmacodynamics.		20,000
JAY, F.T., Medical Microbiology, Univ. of Manitoba. Rabies Vaccine.		36,500
KAUFERT, J.M., KOOLAGE, W.W. and O'NEIL, J.D., Social & Preventive Medicine, Univ. of Manitoba. The Impact of Native Medical Interpreters Upon Health Communications in Two Urban Hospitals.		36,200
KING, M.W. and ESKIN, N.A.M., Human Ecology, Univ. of Manitoba. The Role of Enzymes in the Degradation of Polyester Vascular Prostheses.		19,400
KRYGER, M.H. and LIGHT, R.B., Internal Medicine, Univ. of Manitoba. Perfluorochemicals (Artifical Blood) in Hypoxemic Respiratory Failure.		33,600
LAM, H.Y.P., Internal Medicine, Univ. of Manitoba. Interaction of Antineoplastic Agents With Calmodulin.		35,000
MATHEWSON, F.A.L., MYMIN, D. and MANFREDA, J., Internal Medicine, Social & Preventive Medicine, Univ. of Manitoba. The University of Manitoba Follow-Up Study. An Investigation of Cardiovascular Disease: 35 Years of Follow-Up.		45,000
MCKENZIE, J.K., Internal Medicine, Univ. of Manitoba. Active and Inactive Renin in Kidney, Plasma and Peritoneal Fluid in the Cat.		16,000
MEHTA, A., THLIVERIS, J. and YATSCOFF, R., Internal Medicine, Univ. of Manitoba. Relationship of Non-Enzymatic Glycation to Basement Membrane Thickening of Kidney and Muscle in Diabetes Mellitus.		33,000
PARASKEVAS, F., Internal Medicine, Univ. of Manitoba. Antisuppression: A Novel Immunoregulatory Pathway.		38,000

List of Operating Grants (Continued)

PATERSON, J.A., Anatomy, Univ. of Manitoba. Remyelination in the Rodent Cerebrum After Experimentally-Induced Focal Demyelination.	$ 23,900
POLIMENI, P.I., Physiology, Univ. of Manitoba. Study on the Mechanism of Cardiac Output Enhancement by Drag-Reducing Agents.	27,500
POSTL, B.D. and GARRO, L.C., Social & Preventive Medicine, Univ. of Manitoba. Illness Beliefs and Choice of Treatment in Two Manitoba Communities.	45,000
RAY, M., Human Genetics, Univ. of Manitoba. Chromosome Analyses from Chorionic Villi Samples in the First Trimester of Pregnacy.	15,000
ROOS, L.L., MORRIS, A. and DANZINGER, R.G., Social & Preventive Medicine, Univ. of Manitoba. Small Area Variation in Endoscopy and Coronary Angiography Rates: Some New Approaches.	21,000
SHIU, R.P.C., Physiology, Univ. of Manitoba. Hormonal Regulation of Gene Expression in Human Breast Cancer Cells.	35,000
SIMONS, K.J. and SIMONS, F.E.R., Pharmacy, Univ. of Manitoba. Studies of the Pharmacokinetics and Efficacy of Histamine (H_1) Antagonists Using Hydroxyzine as a Prototype Drug.	43,000
WEINERMAN, B.H. and ORR, K.B., Internal Medicine, Univ. of Manitoba. Infusion Chemotherapy in Mice With Colorectal Cancer.	17,900
WISEMAN, G.M., Medical Microbiology, Univ. of Manitoba. The Effect of Bacterial Adhesion on Chloride Transport and Na-K Pump Activity in Membranes of Erythrocytes and Phagocytes, With Special Reference to Neisseria Gonorrhoeae.	30,000
WRIGHT, J.A. and JAMIESON, J.C., Biochemistry, Univ. of Manitoba. Studies on Myogenesis and Its Importance in Muscle Cell Disease.	22,500
YOUNES, M.K., Internal Medicine, Univ. of Manitoba. Breathing Pattern and Hemodynamics With Massive Increases in Cardiac Output.	29,000
	$ 972,300

PERSONNEL AWARDS

A. SCIENTIFIC REVIEW COMMITTEE

Dr. N.R. Anthonisen (Chairman), Department of Internal Medicine, University of Manitoba.

Dr. J. Adair, Department of Psychology, University of Manitoba.

Dr. I. Adamson, Department of Pathology, University of Manitoba.

Dr. C. Becker, School of Nursing, University of Manitoba.

Dr. D.N. Burton, Department of Microbiology, University of Manitoba.

Dr. N. Chappell, Centre on Aging, University of Manitoba.

Dr. C.M. Dowse, Department of Oral Biology, University of Manitoba.

Dr. C. Faiman, Department of Internal Medicine, Health Sciences Centre.

Dr. J.C. Jamieson, Department of Chemistry, University of Manitoba.

Dr. E.A. Kroeger, Department of Physiology, University of Manitoba.

Dr. P. McAlpine, Department of Human Genetics, University of Manitoba.

Dr. H. Rigatto, Department of Pediatrics, University of Manitoba.

Dr. G. Wiseman, Department of Medical Microbiology, University of Manitoba.

Dr. J. Wright, Cell Biology Institute, University of Manitoba.

B. LIST OF PERSONNEL AWARDS

SCHOLARSHIPS

DAVIE, J.R., Biochemistry, Univ. of Manitoba. Comparative Structure of Transcriptionally Active and Inactive Chromatin.	$ 15,000
DODD, J.G., Physiology, Univ. of Manitoba. Cloning and Characterization of Genes Expressed by the Human Prostate.	30,000
GEIGER, J.D., Pharmacology & Therapeutics, Univ. of Manitoba. Neurochemical Studies of Adenosine as a Putative Transmitter in the CNS.	30,000
MINK, S.N., Interal Medicine, Univ. of Manitoba. Factors Affecting Wave-Speed Limit on Expiratory Flow.	30,000
	$ 105,000

ESTABLISHMENT GRANTS

GEIGER, J.D., Pharmacology & Therapeutics, Univ. of Manitoba. Neurochemical Studies of Adenosine as a Putative Transmitter in the CNS.	$ 20,000
SUTHERLAND, G., Surgery, Univ. of Manitoba. The Protective Effect of the Combination Fluosol-DA, Nimodipine, and Dimethylsulfoxide on Cerebral Ischemia.	19,000
	$ 39,000

POSTDOCTORAL FELLOWSHIP AWARDS

Fellow, Department, Institution. Project or Field of Research. (Supervisor)	Award Amount
COUCH, R.M., Pediatrics, Univ. of Manitoba. Pediatric Endocrinology. (Winter, J.S.D.)	$ 27,025
CROZE, F., Physiology, Univ. of Manitoba. Reproductive Endocrinology, Control of Hormone Production. (Friesen, H.G.)	18,900
DEMBINSKI, T.C., Physiology, Univ. of Manitoba. Recombinant DNA/Gene Cloning. (Shiu, R.P.C.)	21,420
HATTON, T.W., Physiology, Univ. of Manitoba. Recombinant DNA and Protein Chemistry in Endocrinology. (Friesen, H.G.)	20,160
MAKINO, N., Physiology, Univ. of Manitoba. Cardiovascular Physiology. (Dhalla, N.S.)	20,160
MAYERS, I., Internal Medicine, Univ. of Manitoba. Pulmonary Physiology. (Oppenheimer, L.)	28,650
McKENNA, R.M., Internal Medicine, Univ. of Manitoba. Immunobiology of Human Autoimmmune Disease. (Wilkins, J.A.)	21,420
MURPHY, P.R., Physiology, Univ. of Manitoba. Endocrine Physiology. (Friesen, H.G.)	18,900
PAWLAK, J.K., Medical Microbiology, Univ. of Manitoba. Molecular Biology/Biotechnology. (Jay, F.T.)	18,900
ROYLE, N.J., Human Genetics, Univ. of Manitoba. Recombinant DNA/Somatic Cell Genetics. (Hamerton, J.L.)	20,160
SCOOT, A., Biochemistry, Univ. of Manitoba. Production, Purification and Characterization of Monolonal Antibodies Towards Biotin and Their Use to Produce an Acute Biotin Deficiency in Mice in Order to Study the Effect of Biotin Deficiency on the Immune System. (Dakshinamurti, K.)	21,420
VRONTAKIS, M., Physiology, Univ. of Manitoba. Endocrinology. (Friesen, H.G.)	20,160

Postdoctoral Fellowship Awards (Continued)

WISTER, A.V., Sociology/Centre on Aging, Univ. of Manitoba. Living Environments, Health, and Support Networks of the Elderly. (Chappell, N.L.)	$ 18,900
	$ 276,175

STUDENTSHIP AWARDS

Student, Department, Institution. Project or Field of Research. (Supervisor)	Award Amount
ALLESLEV, L.J., Human Genetics, Univ. of Manitoba. Human Genetics. (McAlpine, P.J.)	$ 9,870
ANDERSON, J.E., Anatomy, Univ. of Manitoba. Endocrinology of the Diabetic Pituitary-Gonadal Axis in the Male Rat. (Thliveris, J.A.)	9,870
CHIPPERFIELD, J.G., Psychology, Univ. of Manitoba. Developmental Psychology. (Eaton, W.O.)	9,870
COLEMAN, P.B., Physiology, Univ. of Manitoba. Cardiovascular Physiology and Pathophysiology. (Polimeni, P.I.)	9,870
FELDKIRCHER, K.M., Psychology, Univ. of Manitoba. Physiological Psychology (Developmental Psychobiology). (Wilson, L.M.)	9,870
GUSE, L.W., Centre on Aging, Univ. of Manitoba. Health Care Research in Gerontology. (Chappell, N.L.)	9,870
HOBMAN, T.C., Human Genetics, Univ. of Manitoba. Molecular and Human Genetics. (Hamerton, J.L.)	9,870
HOCHMAN, S., Physiology, Univ. of Manitoba. Neurophysiology. (McCrea, D.)	9,870
HRYSHKO, L.V., Pharmacology & Therapeutics, Univ. of Manitoba. Pharmacology. (Bose, D.)	9,870
KANDRACK, M.A., Sociology, Univ. of Manitoba. Sociology of Health Care. (Segall, A.)	9,870
KEHLER, J.P., Physiology, Univ. of Manitoba. Neurophysiology. (McCrea, D.)	9,870

Studentship Awards (Continued)

KRIELLARS, D.J., Physiology, Univ. of Manitoba. Neurophysiology. (Jordan, L.M.)	$ 9,870
KUTRYK, M.J.B., Physiology, Univ. of Manitoba. Cardiovascular Physiology. (Dhalla, N.S.)	9,870
MACLEAN, I.W., Medical Microbiology, Univ. of Manitoba. Sexually Transmitted Diseases. (Brunham, R.C.)	9,870
MEYER, N.E., Psychology, Univ. of Manitoba. Clinical Psychology, Behavioral Specialization. (Dyck, D.)	9,870
MILLER, V., Immunology, Univ. of Manitoba. Tumor Immunology. (Greenberg, A.)	9,870
MILNE, R.L., Biochemistry, Univ. of Manitoba. Fetal Alcohol Syndrome. (Kanfer, J.N.)	9,870
NEUFELD, K.R., Nursing, Univ. of Manitoba. Measuring Desire for Control Over Health Care in Manitoba Women Newly Diagnosed With Cancer of the Breast. (Degner, L.)	9,870
NICKEL, B.E., Biochemistry, Univ. of Manitoba. The Mechanism of the Transcriptional Control in Eukaryotes. (Davie, J.R.)	9,870
ODUMERU, J., Medical Microbiology, Univ. of Manitoba. Virulence Factors of Haemophilus Ducreyi. (Wiseman, G.)	9,870
SIOW, Y.L., Biochemistry, Univ. of Manitoba. Neurochemistry - DOPA and 5HTP Decarboxylases in Rat Brain. (Dakshinamurti, K.)	9,870
WIENTZEK, M., Biochemistry, Univ. of Manitoba. Lipid Metabolism in Mammalian Organs. (Choy, P.C.)	9,870
WONG, P., Human Genetics, Univ. of Manitoba. Human Biochemical Genetics. (McAlpine, P.)	9,870
	$ 277,010

SUMMER STUDENTSHIPS

GALBRAITH, P.F., Pharmacology & Therapeutics, Univ. of Manitoba. Neuropharmacology. (C. Pinsky)	$ 3,000
SUD, A., Pharmacology & Therapeutics, Univ. of Manitoba. Pharmacology and Therapeutics. (I. Bihler)	3,000
	$ 6,000

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